

What is claimed is:

1. An ink jet printer comprising:

a recording head on which a plurality of nozzles for jetting ink are arranged; and

a feeding member for feeding a recording medium,

wherein an image is recorded by jetting the ink from the nozzles of the recording head to the recording medium fed by the feeding member;

wherein a jetting opening of each nozzle, from which the ink is jetted, has a diameter of not less than 12  $\mu\text{m}$  and not more than 22  $\mu\text{m}$ , and the ink substantially includes no volatile component.

2. The ink jet printer of claim 1; wherein a volume of a drop of the ink jetted from the nozzle is not less than 1 pico-liter and not more than 6 pico-liter.

3. The ink jet printer of claim 1; wherein a supply opening side of each nozzle, to which the ink is supplied, differs from a jetting opening side of each nozzle in an angle of an inner circumferential surface of the nozzle with respect to a center line of the nozzle.

4. The ink jet printer of claim 1, further comprising:

a head temperature adjusting mechanism arranged in

the neighborhood of the jetting opening, for adjusting a temperature of the ink at the jetting opening to not less than 30 °C.

5. The ink jet printer of claim 1; wherein a viscosity of the ink is not less than 20 mPa·s and not more than 200 mPa·s at 25 °C, and the viscosity of the ink is not less than 8 mPa·s and not more than 30 mPa·s when the ink is jetted from each nozzle.

6. The ink jet printer of claim 1; wherein the ink includes an active energy ray curable compound.

7. The ink jet printer of claim 6, further comprising:

an active energy ray radiating member for radiating an active energy ray to the recording medium to which the ink is jetted from the nozzle, in order to harden the active energy ray curable compound.

8. An image recording method comprising: forming an image by jetting ink to a recording medium with the ink jet printer of claim 1.

9. A recording head comprising: a plurality of nozzles for jetting ink,

wherein a jetting opening of each nozzle, from which the ink is jetted, has a diameter of not less than 12  $\mu\text{m}$  and not more than 22  $\mu\text{m}$ .

10. The recording head of claim 9; wherein a volume of a drop of the ink jetted from the nozzle is not less than 1 pico-liter and not more than 6 pico-liter.

11. The recording head of claim 9; wherein a supply opening side of each nozzle, to which the ink is supplied, differs from a jetting opening side of each nozzle in an angle of an inner circumferential surface of the nozzle with respect to a center line of the nozzle.

12. The recording head of claim 9, further comprising;

a head temperature adjusting mechanism arranged in the neighborhood of the jetting opening of the nozzle, for adjusting a temperature of the ink at the jetting opening to not less than 30 °C.

13. Ink for an ink jet printer, including color material,

wherein the ink substantially includes no volatile component.

14. The ink of claim 13; wherein a viscosity of the ink is not less than 20 mPa·s and not more than 200 mPa·s at 25 °C, and the viscosity of the ink is not less than 8 mPa·s and not more than 30 mPa·s when the ink is jetted from a nozzle of the ink jet printer.

15. The ink of claim 13; wherein the ink includes an active energy ray curable compound.